AMENDMENT TO THE CLAIMS

Claim 1 (Currently amended): A medical device comprising a stimulation compound that ~~stimulates~~ activates an enhancer/hypoxia response element for production of VEGF, the medical device being an implantable medical device, a catheter, a dressing or a surgical instrument.

Claim 2 (Original): The medical device of claim 1 wherein the stimulation compound comprises a polypeptide.

Claim 3 (Original): The medical device of claim 2 wherein the polypeptide comprises hypoxia-inducible factor 1.

Claim 4 (Original): The medical device of claim 2 wherein the polypeptide comprises hypoxia-inducible factor 1-alpha.

Claim 5 (Original): The medical device of claim 2 wherein the polypeptide comprises a mutant form of hypoxia-inducible factor 1-alpha that is more stable than the native form under non-hypoxia conditions.

Claim 6 (Original): The medical device of claim 2 wherein the polypeptide binds to the VEGF hypoxia response element.

Claim 7 (Original): The medical device of claim 1 wherein the stimulation compound stimulates transcription of VEGF.

Claim 8 (Original): The medical device of claim 1 wherein the medical device comprises a heart valve prosthesis.

Claim 9 (Original): The medical device of claim 8 wherein the valve has flexible leaflets.

Claim 10 (Original): The medical device of claim 9 wherein the flexible leaflets comprise a polymer.

Claim 11 (Original): The medical device of claim 9 wherein the flexible leaflets comprise tissue.

Claim 12 (Original): The medical device of claim 11 wherein the stimulation compound is associated with the tissue leaflets.

Claim 13 (Original): The medical device of claim 9 wherein the heart valve prosthesis further comprises a support structure supporting the leaflets and a sewing cuff.

Claim 14 (Original): The medical device of claim 13 wherein the sewing cuff comprises fabric and wherein the fabric is associated with the stimulation compound.

Claim 15 (Original): The medical device of claim 13 wherein the stimulation compound is associated with the support structure supporting the leaflets.

Claim 16 (Original): The medical device of claim 8 wherein the valve has a rigid pivoting occluder.

Claim 17 (Original): The medical device of claim 1 comprising a sewing cuff wherein the stimulation compound is associated with the sewing cuff.

Claim 18 (Original): The medical device of claim 1 wherein the medical device comprises a vascular graft.

Claim 19 (Original): The medical device of claim 1 wherein the medical device comprises a polymer material in which VEGF production stimulator is incorporated within the polymer material.

Claim 20 (Original): The medical device of claim 1 wherein the prosthesis comprises tissue.

Claim 21 (Original): The medical device of claim 20 wherein the tissue is crosslinked.

Claim 22 (Original): The medical device of claim 20 wherein the tissue is uncrosslinked.

Claim 23 (Original): The medical device of claim 1 wherein the prosthesis comprises at least about 10 mg of stimulation compound.

Claim 24 (Original): The medical device of claim 1 wherein the prosthesis comprises at least about 100 mg of stimulation compound.

Claim 25 (Original): The medical device of claim 1 wherein the medical device is a vascular stent comprising a biocompatible material.

Claim 26 (Original): The medical device of claim 1 wherein the stimulation compound is releasably bound to a material of the medical device.

Claim 27 (Original): The medical device of claim 26 wherein the stimulation compound is adhesively bonded.

Claim 28 (Original): The medical device of claim 26 wherein the stimulation compound is covalently bonded.

Claim 29 (Original): The medical device of claim 26 wherein the stimulation compound is microencapsulated.

Claim 30 (Original): The medical device of claim 1 wherein the medical device comprises an annuloplasty ring.

Claim 31 (Currently Amended): A method for producing a medical device, the method comprising associating a stimulation compound that activates an enhancer/hypoxia response element, the stimulation compound associated with a biocompatible material to stimulate the production of growth factors.

Claim 32 (Original): The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises direct association.

Claim 33 (Original): The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises chemical bonding.

Claim 34 (Original): The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises adhesive bonding.

Claim 35 (Original): The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises incorporating the stimulation compound into the matrix of the biocompatible material.